Ideal Custom Solution

Filter Driver
Change Tracking

Replication Service

RTC Live VSS Mount

Mount Point Service

Decremental Volume Metadata

Change Log DB

Payload: [Time,Sectors]

Structure: MMAP BTree

VSS

MFT File Delta

Optimal Delta

Security

Compression

Block

Network Block Storage Service

Local

WAN

Archival
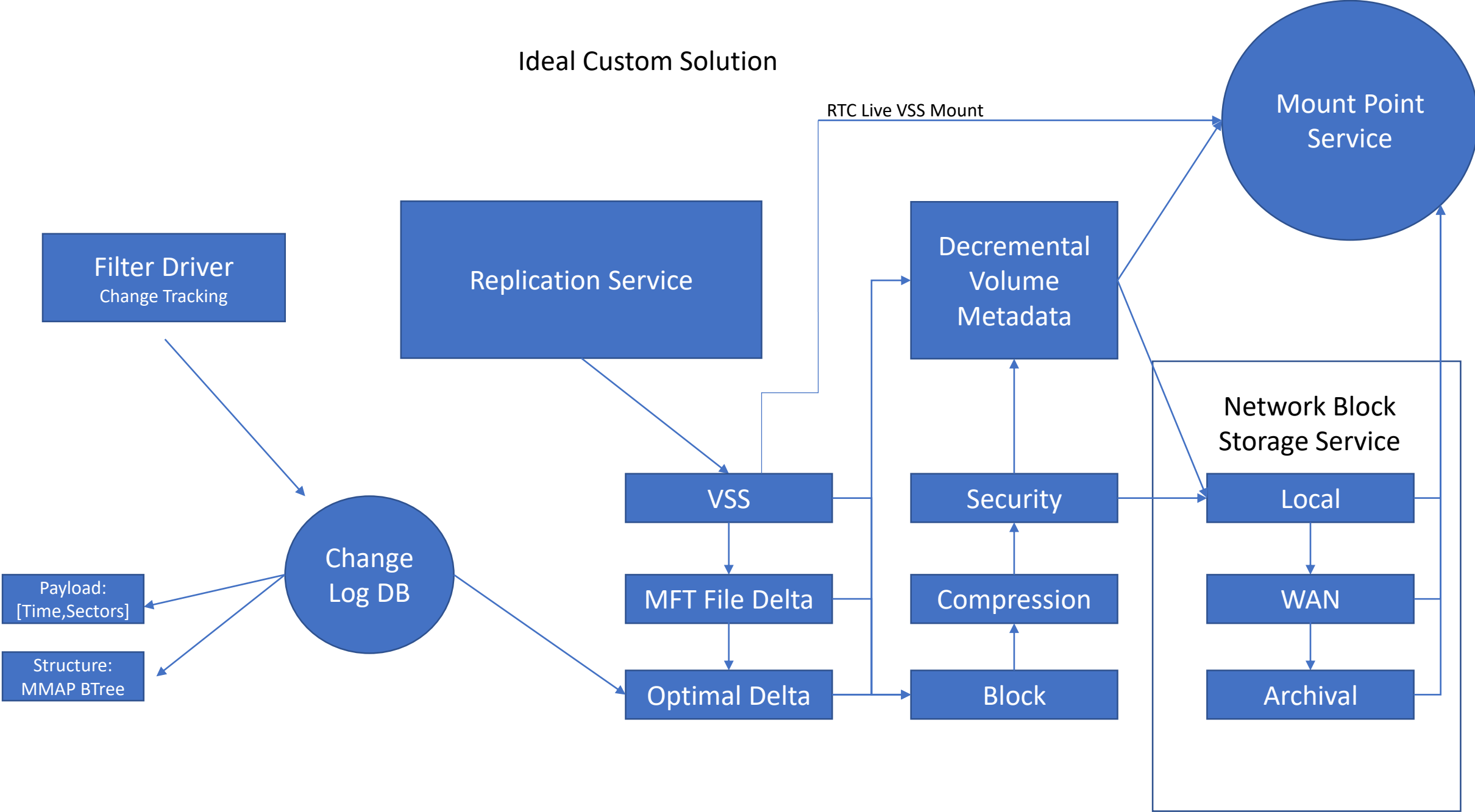
How does it Work (1)?

- Filter Driver Maintains a change log of blocks for a device.

- VSS Snapshot gives atomic transactional view of volume.

- Using block change log and file system change log build dual perspective map of optimal delta volume blocks.

- Create a decremental node for point it time.

- Save Blocks and Metadata to storage stack.

How does it Work (2)?

- Bonus: VSS Snapshots can be P2P shared for instant boot anywhere. Reads auto sync into a point in time and storage. Backup as you use.

- Decremental Head Metadata is read.

- Virtual Block object mounted with fuse or ISCSI reads from storage stack as used or with prefetch cache.

Summary

- Can this Work, May Be if developed in stages.

- Work up front to prototype. Working Skeleton in a few months, without filter driver, full storage stack or fuse mount.

- Features added over time.

- The ideal product offering, entire custom transport protocol with bindings to storage providers.

- 100% efficient.